

Abstract

Fuel-, ballast-, utility- or freight-tanks of ships are
5 frequently equipped with an open sounding tube, which
serves for the mechanical sounding of the fill level of
the medium in the tank. In the case of fill level
measurements in the sounding tube with measuring
devices, which work with microwave signals, it has been
10 found that the wanted signals can be superimposed in a
lower region of the sounding tube by strong disturbance
signals, which come from the tank floor.

In order to be able to determine reliably the fill
15 level of the medium reliably in a tank equipped with
such a sounding tube (12) also by means of a microwave
fill level measuring device, the invention provides an
arrangement which includes a deflecting device (24) for
deflecting the microwave signals in an end region (22)
20 of the sounding tube. So that it will still be
possible to perform sounding measurements in such tank
using a mechanical sounding device, a microwave-
transmissive support (34) is provided for the plumb
device in the region of the deflecting device (24).

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(Fig.

5)

Reference Characters

	10	arrangement
5	12	sounding tube
	14	upper end of the sounding tube
	16	adapter for fill level measuring device
	18	microwave fill level measuring device
	20	Y-adapter
10	22	lower end of sounding tube
	24	deflecting plate (first kind)
	26	angular deflecting plate (second kind)
	28	holder for angular deflecting plate
	30	clamp
15	32	support, with holes
	34	window
	36	rim for holding window
	50	tank
	52	tank roof
20	54	tank floor
	56	signal path
	58	medium